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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,187	06/27/2001	Gordon Brent Vikse	14088	3901

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EXAMINER

CAI, WAYNE HUU

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,187

Applicant(s)

VIKSE ET AL.

Examiner

Wayne Cai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/24/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 7, and 25-27 are objected to because of the following informalities:
 - On line 1 of claim 7, "The system of claim 1" should be corrected as
- -The method of claim 1- -
 - Claims 25-27 should be dependent upon claim 24.
 - Claim 25, "The system of claim 22" should be "The device of claim 24".Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffman (US – 6,622,017 B1).

Regarding claim 1, Hoffman discloses a method of programming a remote device, the method comprising:

- transmitting computer code to the remote device using a wireless technique (col.10, lines 44-60);
- writing the computer code to at least one memory device located in the remote device (col.10, lines 61-67).

Regarding claim 2, Hoffman discloses the method of claim 1 as described above. Hoffman also discloses wherein the wireless technique is an over-the-air technique (title, fig.1 and its descriptions).

Regarding claim 3, Hoffman discloses the method of claims 1 as described above. Hoffman further discloses wherein the remote device is a cellular phone (fig.1, element 5) and wherein the computer code is transmitted over a cellular phone network (fig.2, and its descriptions).

Regarding claim 24, Hoffman discloses a remote device for receiving and storing a computer code update, the device comprising:

- a receiver for receiving the computer code update (fig.1, element 5);
- a programmable memory (col.12, lines 48-57);
- a microcontroller adapted to execute code for writing the computer code update into the programmable memory (col.12, lines 48-57).

4. Claims 31, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by McAlinden (US 2002/0193101 A1).

Regarding claim 31, McAlinden discloses a processor on a mobile platform, the processor capable of being updated using software received over the air, the processor comprising:

- flash memory adapted to allow a software update to be burned in (fig.2, element "25(1)");
- a burner program (paragraph 0025);
- a message processor program (fig.2, element 30).

Regarding claim 34, McAlinden discloses the processor of claim 31 as described above. McAlinden also discloses wherein the processor is shutdown and restarted after receipt of the complete software package (paragraph 0027).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman.

Regarding claims 4, Hoffman discloses the method of claim 1 as described above, except for the remote device is located on a mobile platform, vehicle, or truck. However, it is obvious to one skilled in the art to place the remote device (fig.1, element

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5) on a mobile platform, vehicle or truck because it is more convenient for users to access to the device at anytime and anywhere.

Regarding claims 5-6, Hoffman discloses the method of claims as described above. Hoffman further discloses detecting the presence of the complete code (col.10, lines 44-60). Hoffman is silent on the computer code is transmitted as a plurality of packets and combining the plurality of packets into a complete code segment. However, it is well known in the art that multiple packets of code are combined into a one complete segment because each packet represents different information, and it needs to be integrated together to be transferred over the network all at once.

7. Claims 7-17, 18-23, 25-30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of McAlinden (US 2002/0193101 A1).

Regarding claims 7, 8, 15, and 25, Hoffman discloses all the limitations as described above. Hoffman, however, does not teach, wherein the at least one memory device is a programmable memory, and wherein the programmable memory is selected from the group consisting of: an EPROM, and EEPROM, and a flash memory.

In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also discloses wherein the memory is programmable memory from the group consisting of: EPROM, EEPROM, and a flash memory (paragraphs 0015 & 0029).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include this type of memory because the non-volatile memory is re-usable/re-writeable.

Regarding claim 9, Hoffman discloses the method of claim 1 as described above. Hoffman, however, fails to disclose prior to writing the computer code, initiating a reboot of the remote device.

In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also discloses prior to writing the computer code, initiating a reboot of the remote device (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to initiate a reboot of the remote device so that everything could be reset.

Regarding claim 10, Hoffman discloses a method of providing computer code to a programmable memory of a remote device, using a wireless communication technique, the method comprising:

- downloading a code segment and storing the code segment in a first memory (col.13, lines 26-32);
- burning the code segment into the programmable memory (col.12, lines 19-36).

Hoffman, however, fails to disclose wherein initiating a reboot of the remote device.

In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also discloses wherein initiating a reboot of the remote device (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an initiating a reboot of the remote device so that the software and hardware could be restarted and taken effect.

Regarding claim 11, both Hoffman and McAlinden disclose the method of claim 10 as described above. Hoffman also discloses wherein the wireless technique is an over-the-air technique (title, fig.1 and its descriptions).

Regarding claim 12, both Hoffman and McAlinden disclose the method of claim 10 as described above. Hoffman also discloses the remote device is a cellular phone (fig.1, element 5) and wherein the code segment is downloaded across a cellular phone network (fig.2, and its descriptions).

Regarding claim 18, Hoffman discloses a method for over the air programming of computer code at a remote platform having a local computer, the local computer including a flash memory, the method comprising:

- receiving a plurality of computer code packets, wherein the plurality computer code packets are provided by wireless transmission (col.10, lines 44-60);
- storing the plurality of computer code packets in a memory of the local computer, wherein the plurality of computer code packets comprise the computer code (col.10, lines 61-67);

- recognizing reception of a complete copy of the computer code at the local computer (col.10, lines 61-67);
- burning the received computer code into the flash memory (col.10, lines 61-67);
- erasing the stored computer code from the continuous memory (col.7, lines 1-9);

Hoffman, however, fails to disclose:

- shutting down, rebooting, restarting the local computer;

In a similar endeavor, discloses McAlinden discloses a way of configuring a portable device. McAlinden also discloses shutdown, reboot, restarting the local computer (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reboot the local computer so that the software and hardware parts could be reinitiated.

Regarding claim 21, Hoffman discloses a method for updating computer code in a remote computer, comprising:

- downloading a plurality of messages, each of the plurality of messages comprising a segment of the computer code (col.10, lines 44-60);
- storing the downloaded computer code in non-volatile memory (col.10, lines 61-67);
- detecting when a complete set of the computer code comprising a complete set of the plurality of messages have been downloaded (col.10, lines 61-67);

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- starting a computer code burn in process, comprising:
 - (i) assembling the complete set of the computer code into a continuous memory (col.10, lines 44-60),
 - (ii) burning the computer code into a flash memory of the remote computer (col.10, lines 61-67);
 - (iii) deleting the stored computer code from the non-volatile memory (col.7, lines 1-9);

Hoffman, however, fails to disclose:

- rebooting the remote computer;

In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also discloses rebooting the remote computer (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reboot the local computer so that the software and hardware parts could be reinitiated.

Regarding claim 27, Hoffman discloses the device of claim 22 as described.

Hoffman, further teaches wherein the microprocessor executes code for performing the following steps:

- assembling the computer code update into a memory (col.6, lines 5-23);
- burning the computer code into the programmable memory (col.10, lines 61-67);
- deleting the computer code update from the memory (col.7, lines 1-9);

Hoffman, however, fails to disclose rebooting the remote device.

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In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also teaches rebooting the remote device (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reboot the remote device so that the software and hardware parts could be reset.

Regarding claim 28, Hoffman discloses a system for over the air programming of computer code in a local computer having a flash memory, the system comprising:

- a central location that distributes updated computer code to the local computer using a plurality of computer code packets over a wireless transmission medium (fig.1, element 37);
- a receiver at the local computer that receives the updated computer code (element 5);
- a non-volatile memory at the local computer that stores the updated computer code (element 25);
- a detection module at the local computer that detects when all required computer code packets have been stored (col.6, lines 5-23);
- a burner program that checks the non-volatile memory for all required computer code packets, assembles the computer code packets into computer code (col.10, lines 44-60), burns the computer code into the flash memory (col.10, lines 61-67), and erases the computer code from the stored updated computer code from the non-volatile memory (col.7, lines 1-9).

Hoffman, however, fails to disclose:

- initiates a reboot process;
- a reboot program that reboots the local computer after burning the computer code into the flash memory.

In a similar endeavor, McAlinden discloses:

- initiates a reboot process (paragraph 0027);
- a reboot program that reboots the local computer after burning the computer code into the flash memory (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McAlinden with Hoffman's method to detect all computer code packets has been transmitted and burned properly so that it is ready for users to use without incurring any problems.

Regarding claim 35, Hoffman discloses an apparatus that provides over the air programming of a host processor, the apparatus comprising:

- means for receiving software over the air (fig.1, element 5);
- means for burning in the received software (col.10, lines 61-67);

Hoffman, however, fails to discloses wherein means for rebooting the processor.

In a similar endeavor, McAlinden discloses a way of configuring a portable device. McAlinden also discloses wherein means for rebooting the processor (paragraph 0027).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reboot the processor so that the downloaded software could be reinitiated.

Regarding claims 13-14, 19-20, 22-23, 26, and 29-30, Hoffman and McAlinden both disclose the method as described above, except for the remote device is located on a mobile platform, vehicle, or truck. However, it is obvious to one skilled in the art to place the remote device (fig.1, element 5) on a mobile platform, vehicle or truck because it is more convenient for users to access to the device at anytime and anywhere.

Regarding claims 16-17, Hoffman and McAlinden disclose the method of claims as described above. Hoffman further discloses detecting the presence of the complete code (col.10, lines 44-60). However, both Hoffman and McAlinden fail to disclose transmitting the computer code as a plurality of packets, combining the plurality of packets into a complete code segment.

Hoffman and McAlinden are silent on the computer code is transmitted as a plurality of packets and combining the plurality of packets into a complete code segment. However, it is well known in the art that multiple packets of code are combined into a one complete segment because each packet represents different information, and it needs to be integrated together to be transferred over the network all at once.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAlinden, in view of Marran (US 6,549,770 B1).

Regarding claim 32, McAlinden discloses the processor of claim 31 as described above. McAlinden, however, fails to disclose wherein the message processor program comprises:

- a reboot routine that directs a reboot when the detection module detects the complete software update (paragraph 0027).

In a similar endeavor, Marran discloses an over the air programming. Marran also discloses:

- a detection routine that detects when a complete software update is received at the processor (col.12, lines 37-64);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to detect when a complete software update is received so that it could terminate or process any other steps if necessary.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAlinden in view of Marran, and in further view of Shaw (US – 6,341,373 B1).

Regarding claim 33, McAlinden discloses the processor of claim 31 as described above. McAlinden further discloses a programmable memory burner routine that burns the software update into the flash memory (paragraph 0029).

McAlinden, however, fails to disclose, wherein the burner program comprises:

- an assembly routine that assembles software packets comprising the complete software update,
- a decompression routine that decompresses compressed software packets;

- a validation routine that error checks the software packets;

In a similar endeavor, Marran discloses an over the air programming. Marran further discloses:

- an assembly routine that assembles software packets comprising the complete software update (col.12, lines),
- a validation routine that error checks the software packets (col.12, lines 37-64);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a validation routine to check whether the programming data is downloaded to the cellular phone properly or not.

Furthermore, neither McAlinden nor Marran discloses a decompression routine that decompressed software packets.

In a similar endeavor, Shaw discloses a method and system for secure downloading, recovery, and upgrading data. Shaw also discloses a decompression routine that decompresses compressed software packets (col.3, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to compress data and decompress before using data because it would save memory space.

10. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman, in view of McAlinden, and in further view of Marran (US 6,549,770 B1).

Regarding claim 36, Hoffman and McAlinden both disclose the apparatus of claim 35 as described above. Both Hoffman and McAlinden fail to disclose wherein the means for burning in the received software, comprises:

- means for verifying that a complete package of the software is received;
- means for signaling when the complete package is received;
- wherein the means for burning in burns the complete software package into a flash memory of the processor.

In a similar endeavor, Marran discloses an over-the-air programming. Marran also discloses:

- means for verifying that a complete package of the software is received (col.12, lines 37-64);
- means for signaling when the complete package is received (col.12, lines 32-36);
- wherein the means for burning in burns the complete software package into a flash memory of the processor (col.12, lines 29-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to verify and signal when the complete package is received so that the transferring process could be terminated.

Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798.

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The examiner can normally be reached on Monday-Friday; 9:00-6:00; alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Wayne Cai
Examiner
Art Unit 2681


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